



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: PW4168A
 UNIQUE ID NUMBER: 7PW082
 COMBUSTOR: Talon II
 ENGINE TYPE: TF

BYPASS RATIO: 5.1
 PRESSURE RATIO (π_{00}): 31.8
 RATED THRUST (F_{00}) (kN): 302.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.5	27.4	53.3	16.4
AS % OF ORIGINAL LIMIT	2.3	23.2	51.4	93.5
AS % OF CAEP/2 LIMIT (NO _x)			64.3	
AS % OF CAEP/4 LIMIT (NO _x)			75.4	
AS % OF CAEP/6 LIMIT (NO _x)			85.1	
AS % OF CAEP/8 LIMIT (NO _x)			99.1	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.884	0.00	0.10	26.90	12.5
CLIMB OUT	85	2.2	2.363	0.00	0.20	20.20	11.0
APPROACH	30	4.0	0.809	0.00	2.40	12.10	0.6
IDLE	7	26.0	0.250	0.20	15.90	5.20	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			1017	78	6741	13936	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.3	22.3	46.0	12.5
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101.4-102.3
TEMPERATURE (K)	279-282
ABS HUMIDITY (kg/kg)	0.0021-0.00355

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.5

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: Pratt & Whitney
 TEST LOCATION: East Hartford, CT
 TEST DATES: 10/04/2000

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

REMARKS

1. Data from Report PWA-7138

Compliance with Fuel Venting requirements:

- ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)